



# Information Technology Associate Certificate

This certificate allows students to acquire basic core Information Technology competencies that will prepare them for a career in Computer Networking, Cybersecurity, and related fields.

**Total Units:** 30.5-31.5

## First Year

### Semester 1

**9 Units**

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>CISS 310</b> <sup>Z</sup> Network Security Fundamentals	3	Advisory: CISN 300 & 304	F(O), S(O), Su(O)
<b>CISN 300</b> <sup>Z</sup> Network Systems Administration	3	Advisory: CISC 310	F(O), S(O), Su(O)
<b>CISN 304</b> <sup>Z</sup> Networking Technologies	3	Advisory: CISC 310	F(P), S(O)

<sup>Z</sup> At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

### Semester 2

**5.5 Units**

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>CISN 301</b> Network Client Systems Administration	3	Co-req CISC 323 & 356; Advisory: CISC 302, 308 or 310	Check Class Schedule for offering
<b>CISC 323</b> Linux Operating System	1		Check Class Schedule for offering
<b>CISC 356</b> Introduction to Local Area Networks	1.5		Check Class Schedule for offering

## Year 2

### Semester 3

**7 Units**

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
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## Career

### Options/Outlook:

Computer Network Support Specialists analyze, test, troubleshoot, and evaluate existing network systems, such as local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Perform network maintenance to ensure networks operate correctly with minimal interruption. **Career opportunities may require more than two years of college study.**

### A sample of reported job titles:

Computer Network Specialist, IT Consultant (Information Technology Consultant), Network Engineer, Network Specialist, Network Support Specialist, Network Technical Analyst, Network Technician, Personal Computer Network Analyst, Senior IT Assistant (Senior Information Technology Assistant), Systems Specialist

### Projected job openings in California (2020-2030):

1,230

### Projected growth in California (2020-2030):

13% growth

COURSE	UNITS	PRE-REQS <sup>^</sup>	SEMESTERS OFFERED*
<b>CISC 360</b> <sup>Z</sup> Information & Communication Technology Essentials (A+)	4	Advisory: CISC 302 & 310	F(P)
<b>CISS 315</b> Ethical Hacking	3	CISS 310; Advisory: CISS 300	F(O)

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<sup>^</sup>You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

\*(O) = online available (P) = partially online

## Semester 4

9-10 Units

COURSE	UNITS	PRE-REQS <sup>^</sup>	SEMESTERS OFFERED*
<b>CISP 370</b> Beginning Visual Basic <b>or</b>	4	Advisory: CISC 310 or CISP 300	F(O), S(P)
<b>CISP 360</b> Introduction to Structured Programming <b>or</b>	4	CISP 300 or MATH 400	F(P), S(P)
<b>CISS 321</b> <sup>Z</sup> Scripting for Cyber Security	3	CISN 341 & CISS 315	Check Class Schedule for offering
<b>CISN 303</b> Network Administration - Linux Server	3	CISC 360 & CISN 304	Check Class Schedule for offering
<b>CISN 490</b> Networking Helpdesk Practicum	3	CISC 360, CISN 300 & CISN 304	Check Class Schedule for offering

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## Median Salary in California (2020-2030):

\$69,800/yr

## Source:

<https://www.onetonline.org/link/summary/15-1152.00>

## Transfer notes:

Please meet with a counselor for specific transfer course evaluation or transferring to a specific 4-year institution.

## About this map:

This program map represents one possible pathway to complete the program. Please see a counselor to create an education plan that is customized to meet your needs. This map is not a guarantee of course

availability or financial aid applicability.

## Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the [Zero Textbook Costs page](#) of the college website.